



UNITED STATES PATENT AND TRADEMARK OFFICE

MN

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,364	01/24/2002	Tomoya Yoshida	02036/LH	2010

1933 7590 04/18/2007
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

JOO, JOSHUA

ART UNIT	PAPER NUMBER
----------	--------------

2154

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/057,364

Applicant(s)

YOSHIDA, TOMOYA

Examiner

Joshua Joo

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Response to Remarks filed 3/26/2007

1. Claims 14-30 are presented for examination.

Response to Arguments

2. Applicant's arguments filed 3/26/2007 have been fully considered but they are not persuasive.

Applicant argued that:

3. (1) Teng et al does not disclose, teach or suggest that the printer 50 transmits trouble type information to the network server 49, or that the printer 50 accesses the network server 49 to obtain restoration work information based on the trouble type information or to conducting an automatic restoration.
4. In response, Teng teaches,
 - i) Column 8, lines 17-20, "The spooler 74 may, in turn, poll the printer 50 to gather some of the requested information, such as the real time printer status or error information, when the printer 50 supports bi-directional communication."
 - ii) Column 8, lines 39-43, "allowing the user to issue system administration commands back to the network 49 for use in controlling the operation of the system spooler 74/printer 50, for example, to control page setup, printer scheduling, pausing, restarting, or canceling a print job, etc..."
5. According to the above cited passage i, printer error information (trouble type information) is polled from the printer, and therefore, the printer transmits trouble type information.

According to the above cited passage ii, Teng teaches of transmitting restoration work information (commands such as restart, cancel print job) based on the trouble type information to the relaying server (the network server), but Teng does not specifically teach of the printer obtaining, i.e. pull, the commands from the network server. Mui teaches of a printer that can "pull" commands from the source (col. 9, lines 17-20). And, it would have been obvious to one of ordinary skill in the art at the time

Art Unit: 2154

the invention was made to combine the teachings of Teng and Mui for the printer to “pull” commands from the network server, which would allow the printer to retrieve data when the printer is ready.

Furthermore, the printer conducts a process in accordance with the commands (restart, cancel print job), and therefore, the printer performs an automatic restoration process.

6. (2) There would be no motivation to combine the teachings of Motoyama with Teng et al. Since Teng et al. does not teach a technique to conduct an automatic restoration process, there is no motivation to apply the network configuration.

7. In response, Teng was shown to teach a technique to conduct an automatic restoration process. Furthermore, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Teng teaches that, “the network connections shown are exemplary and other means of establishing a communications link between the computers may be used.” (col. 5, lines 19-22). This clearly suggests that Teng’s network connection is not limited, and other network configurations may be implemented in Teng’s system, such as Motoyama’s network. Motoyama’s teachings as set forth in the Office action dated 12/26/2006 would enhance the security of Teng’s system by allowing only authorized computers to access a network or other computer via the Internet (col. 4, lines 61-65).

8. (3) Motoyama does not disclose, teach, or suggest a relaying server located outside the first and second local networks and connected to the Internet for enabling the administrated apparatus and the administering apparatus to indirectly communicate with each other via the Internet.

Art Unit: 2154

9. In response, Motoyama teaches of interconnected computers and routers, 12A-12I, in the Internet (col. 4, lines 42-45). The interconnected computers are outside the first and second local networks (fig. 1. Networks 16 and 52). Examiner considers any of the interconnected computers such as 12c that routes data between the first and local networks as the relaying server.

10. (4) Motoyama teaches away from using an internet connection for communication in matters requiring urgent attention (column 9, lines 50-65). One of ordinary skill in the art would not have been motivated to combine Motoyama with Teng et al to provide configuration in which restoration work information is obtained via the Internet.

11. In response, Motoyama teaches,

- iii) column 9, lines 50-65, "As with the business office machine, the remote device for controlling, diagnosing, and monitoring the machine may initiate either a connection-mode or connectionless-mode of communication. As with the machine, when the remote monitoring device needs to send urgent information or needs an urgent response from the machine, a connection-mode of communication is used. When time is not critical, the remote device may use a connectionless-mode of communication. For example, if new control software needs to be downloaded to the business office machine due to a bug in the program in the business office machine due to a bug in the program in the business office machine which causes a dangerous condition, a direction connection-mode of communication will be used. Also, as described with respect to the monitored device, if the monitoring device experiences a problem with one of the modes of communication, one of the other modes may be used.

Motoyama further teaches,

- iv) Column 5, lines 37-39, "the connection-mode of communication includes world wide web communications on the Internet."

According to the cited passage iii, a connection mode of communication is used for matters requiring urgent attention. According to cited passage iv, the connection mode may be via the Internet, and therefore, Motoyama does not teach away from using an Internet connection. Furthermore, Examiner respectfully notes that the claims do not define the limits of trouble type information, and trouble type information does not necessarily have to correlate to matters only requiring urgent attention. Motoyama

Art Unit: 2154

also teaches that information not time critical may be sent via connectionless-mode, or use connectionless-mode of communication, when connection-mode of communication is not properly functioning (col. 9, lines 16-18).

12. (5) Mui does not disclose, teach, or suggest communication through the Internet and firewalls, or the transmission of trouble type information and obtaining of restoration work information in the manner recited in independent claim 14.

13. In response, the Examiner cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Mui teaches of a printer obtaining information, but does not specifically teach of the information being restoration work information. Mui also does not specifically teach communication through the Internet and firewalls, or the transmission of trouble type information. Motoyama teaches of communication through the Internet and firewalls (fig. 1; col. 4, lines 61-67; col. 5, lines 31-41), and Teng teaches of transmission of trouble type information and transmitting restoration work information (col. 8, lines 16-20, 29-33, 39-44)

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2154

15. Claims 14-23, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng et al, US Patent #6,240,456 (Teng hereinafter), in view of Motoyama, US Patent #5,887,216 (Motoyama hereinafter) and Mui et al. US Patent #6,362,870 (Mui hereinafter).

16. As per claims 14, 25, and 28, Teng teaches substantially the invention as claimed including an apparatus administration system, an administrated apparatus, and an administrating apparatus, Teng's teachings comprising:

an administrated apparatus connected to the Internet (Fig. 2 printer 50);

an administrating apparatus connected to the Internet (Fig. 2 Network client 20); and

a relaying server connected to the Internet for enabling the administrated apparatus and the administrating apparatus to indirectly communicate with each other via the Internet (Fig. 20 Network server 49. col. 6, line 63-col. 7, line 9. Network server 49 accepts HTTP post request submitted by network client 20. The system spooler 24 will then submit print job data to the printer 50.)

wherein the administrated apparatus comprises: a transmitting section which transmits trouble type information to the relaying server through the Internet, wherein the trouble type information is retrieved from the relaying server by the administrating apparatus through the Internet (col. 8, lines 10-20, 30-33. Network server 49 receives request. Gather printer status or error information from the printer, and submit back to browser application.), receiving restoration work information based on the trouble type information from the relaying server the Internet, and a control section which controls the administrated apparatus to conduct an automatic restoration process in accordance with the restoration work information (col. 8, lines 39-43. Issue commands for use in controlling the operation to the printer 50, e.g. page setup, restart, cancel print job.);

wherein the restoration work information is provided to the relaying server by the administrating apparatus the Internet (col. 8, lines 38-43. Network client 20 issues system administration commands to network server 49 for controlling operation of printer 50.); and

Art Unit: 2154

wherein the relaying server comprises a memory which stores the trouble type information transmitted from the administrated apparatus (col. 8, lines 16-26. Spooler 74 gathers information from printer. Server scripting component 72 receives information from the system spooler 74. Information is stored at the network server for processing and transmission.).

17. Teng teaches of an administrated apparatus, an administrating apparatus, and a relaying server connected to the Internet, wherein any means of establishing a communications link between the computers may be used (col. 5, lines 19-22). Teng also teaches that the administrated apparatus receives restoration work information from the relaying server. However, Teng does not specifically teach the network configuration wherein the administrated apparatus is located in a first local network and connected to the Internet through a first firewall server of the first local network; the administrating apparatus located in a second local network and connected to the Internet through a second firewall server of the second local network; a relaying server located outside the first and second networks. Teng also does not specifically teach the administrated apparatus accessing the relaying server to obtain the restoration work information.

Motoyama teaches of an administrated apparatus, i.e. monitored device, located in a first local network and connected to the Internet through a first firewall server of the first local network (col. 4, lines 26-30. Monitored device, e.g. printer, connected to network 16. col. 5, lines 1-2. Firewall 14 connected between Internet 10 and network 16); an administrating apparatus, i.e. monitoring device, located in a second local network and connected to the Internet through a second firewall server of the second local network (col. 5, lines 2-6. Firewall 50 connected between Internet 10 and network 52. Workstation connected to network 52.); and relaying computer located outside the first and second networks (col. 4, lines 44-45. Internet includes a plurality of interconnected computers and routers.).

Art Unit: 2154

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng and Motoyama to provide the specific network configuration of Motoyama because Teng states that any means of establishing a communications links may be used. The above teachings of Motoyama would also enhance Teng's system by allowing secure communication and authorized access between devices located in different networks (col. 4, lines 61-65).

19. Teng and Motoyama still do not specifically teach of the administrated apparatus accessing the relaying server to obtain the restoration work information.

Mui teaches of a printer obtaining (pull) commands from a source (col. 9, lines 17-20).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama, and Mui for the printer to access and obtain commands from a source. The teachings of Mui would improve the system of Teng and Motoyama by allowing the printer to retrieve commands for further processing when the printer is ready, and reducing the burden of the network server to route data in a system of a plurality of printers.

21. As per claim 15, Teng does specifically teach the image forming apparatus administration system of claim 14, further comprising a database which stores a plurality of items of trouble type information and a plurality of items of restoration work information in correspondence with each other.

Motoyama teaches of a database storing various information of the monitored device, wherein the stored information is compared with received information to determine parameters to change on the monitored device (col. 10, line 2-16, 49-55).

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama, and Mui for the system to comprise a database storing various information of the monitored device, wherein the stored information is compared with received

Art Unit: 2154

information to determine appropriate parameters to change on the monitored device. The teachings of Motoyama would further improve the system of Teng, Motoyama, and Mui by allowing identification of the error information and allowing appropriate changes or commands issued in respect to the error information.

23. As per claim 16, Teng does not specifically teach the image forming apparatus administration system of claim 15, wherein each of the items of trouble type information is classified as corresponding to one of a restorable trouble and non-restorable trouble, and the stored items of restoration work information corresponding to the items of trouble type information classified as being restorable.

Motoyama teaches of a monitored device transmitting results of a diagnostic of a problem, and determining if the problem can be corrected by changing parameters (col. 17, lines 41-50).

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama and Mui to determine if received problem are correctable, i.e. restorable. The teachings of Motoyama would further improve the system of Teng, and Motoyama, and Mui by attempting to correct errors when the errors are classified as restorable before taking additional actions, and preventing an attempt to correct a non-restorable error, which would unnecessary use resources and time.

25. As per claim 17, Teng, Motoyama, and Mui taught the image forming apparatus administration system of claim 15 which includes obtaining restoration information by the printer. Teng teaches wherein the relaying server provides the corresponding restoration information for retrieval by the image forming apparatus based on the trouble type information received from the image forming apparatus (col. 8, lines 29-43. Transmit commands back to the printer to control the operation of the printer, e.g. page setup, canceling, restarting.).

26. As per claim 18, Teng does not specifically teach the apparatus administration system of claim 16, wherein the relaying server judges whether or not the administrated apparatus is able to conduct the automatic restoration process by itself by accessing the database.

Motoyama teaches of determining whether the monitored device may perform self-diagnostic capability to analyze and correct a problem (col. 17, lines 12-14, 26-30.).

27. Motoyama does not explicitly teach of a database. However, a database would be required to obtain parameters for analysis and correction of problems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama, and Mui to determine whether or not the administrated apparatus is able to conduct automatic restoration by itself by accessing a database. The teachings of Motoyama would further improve the efficiency of the system of Teng, Motoyama, and Mui by reducing the time required to correct the problem because the printer would not have to wait for correction parameters.

28. As per claims 19, 27, and 29, Teng, Motoyama, and Mui taught the image forming apparatus administration system of claim 14. Teng further teaches wherein when the automatic restoration process is carried out, the transmitting section of the image forming apparatus transmits result information specifying a result of the automatic restoration process to the relaying server (col. 8, lines 17-20. Printer transmits real time printer status or error information.).

29. As per claims 23 and 26, Teng does not specifically teach the apparatus administration system of claim 14, wherein the image forming apparatus further comprises: a detecting section which detects when a trouble occurs in the image forming apparatus; and a judging section which determines a kind of the

Art Unit: 2154

trouble; and wherein the image forming apparatus transmits the trouble type information in accordance with the determined kind of the trouble.

Motoyama teaches of a monitored device detecting when a trouble occurs in the monitored device (col. 8, line 61-col. 9, line 4), determining the kind of trouble (col. 9, lines 2-10), and transmitting the trouble type information in accordance with the determined kind of trouble (col 9, line 2-10, 19-24).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama, and Mui for the monitored device, i.e. printer, to detect when a trouble occurs in the monitored device, determining the kind of trouble, and transmitting the trouble type information in accordance with the determined kind of trouble. The above teachings of Motoyama would further improve the system of Teng, Motoyama, and Mui by determining sufficient information used to analyze and correct the problem, and providing a type of connection based on the type of problem, i.e. connection-mode for high priority event (col. 8, lines 59-64).

31. As per claim 20, Teng, Motoyama, and Mui taught the apparatus administration system of claim 19. Teng further teaches wherein the administrating apparatus accesses the relaying server to obtain the result information (col. 7, lines 10-15; Col. 8, lines 10-20. Poll printer for real time printer status or error information.).

32. As per claim 21, Teng teaches the image forming apparatus administration system of claim 15, wherein the relaying server comprises the database (col. 8, lines 15-17, 22-26. Gather requested information and generate HTML page. Database would be needed to formulate requests and process requests. col. 8, lines 55-57. Commands issued to system spooler 74.).

Art Unit: 2154

33. As per claim 22, Teng teaches the apparatus administration system of claim 15, wherein the administrating apparatus comprises the database (col. 4, lines 9-13, 29-30. Network client comprises a hard disk. col. 6, lines 22-28. Formulate request for network server.).

34. Claims 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng, Motoyama, and Mui, in view of Wiklof et al, US Patent #6,618,162 (Wiklof hereinafter).

35. As per claims 24 and 30, Teng does not specifically the apparatus administration system of claim 14, wherein the restoration work information is periodically updated.

Wiklof teaches of continually updating restoration work information, i.e. printer's software, wherein the software may include bug fixes (col. 5, lines 22-25; Col. 6, lines 26-29).

36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Teng, Motoyama, Mui, and Wiklof to continually update restoration work information. Wiklof's teachings would enhance the system of Teng, Motoyama, and Mui by providing resources for the printer to correct new problems, and allowing for the upgrading of the printer's performance.

Conclusion

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

Art Unit: 2154

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


NATHAN FLYNN
SUPERVISORY PATENT EXAMINER

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned 571-273-8300.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 12, 2007
JJ